

Cable  
Text:

C O N F I D E N T I A L ISTANBUL 00049

CX:

ACTION: ECON  
INFO: CONS PMA FCS POL PA RAO FAS DCM AMB MGT

DISSEMINATION: ECON /1

CHARGE: PROG

VZCZCAY0011

PP RUEHAK  
DE RUEHIT #0049/01 0401348

ZNY CCCCC ZZH  
P 091348Z FEB 10

FM AMCONSUL ISTANBUL

TO RUEHC/SECSTATE WASHDC PRIORITY 9500  
INFO RUEHZL/EUROPEAN POLITICAL COLLECTIVE PRIORITY  
RUEHGB/AMEMBASSY BAGHDAD PRIORITY 0092  
RUEHLB/AMEMBASSY BEIRUT PRIORITY 0057  
RUEHIL/AMEMBASSY ISLAMABAD PRIORITY 0454  
RUEHKP/AMCONSUL KARACHI PRIORITY 0012  
RHMFIS/39ABG INCIRLIK AB TU PRIORITY  
RUFOADA/JAC MOLESWORTH RAF MOLESWORTH UK PRIORITY  
RUCPDOC/DEPT OF COMMERCE WASHDC PRIORITY  
RUEAIIA/CIA WASHDC PRIORITY  
RUEKJCS/DIA WASHDC PRIORITY  
RUEATRS/DEPT OF TREASURY WASH DC PRIORITY  
RHMFIS/DEPT OF ENERGY WASH DC PRIORITY

C O N F I D E N T I A L SECTION 01 OF 02 ISTANBUL 000049

E.O. 12958: DECL: 02/01/2020

TAGS: [ENRG](#) [SENV](#) [ECON](#) [PREL](#) [PGOV](#) [KGHG](#) [TU](#)

SUBJECT: KARADENIZ HOLDINGS INTRODUCES MOBILE SHIP-BASED POWER PLANTS

REF: A. 08 ANKARA 1120  
[B.](#) 08 ANKARA 227  
[C.](#) 08 ANKARA 172

Classified By: CONSUL GENERAL SHARON A. WIENER FOR REASONS 1.4(B) AND (

D)

[11.](#) (C) Summary. Istanbul-based Karadeniz Holdings, through its subsidiary Karkey, has signed agreements with the Governments of Iraq and Pakistan to provide electricity generation from mobile ship-based power plants. Karkey is constructing six of the so-called "powerships" in an Istanbul shipyard and plans to send the ships to Iraq, Pakistan, and possibly Lebanon over the next year. Karadeniz Holdings' target customers for the powerships are developing countries facing electricity shortages which could fuel social unrest. The powerships can become operational quickly and are intended to be rapidly-mobilized short- to medium- term solutions. While the end-user electricity costs will be higher than costs from an existing combined-cycle power plant, they could be 25 to 30 percent cheaper than some countries' current electrical generation alternatives. End Summary.

Karkey Sending World's First Self-Propelled Powership to Basra

-----  
[12.](#) (C) Karkey, a subsidiary of Karadeniz Holding (the only Turkish company currently exporting electricity to Iraq), is developing the world's first self-propelled ship-based power plant and plans to begin producing electricity for southern Iraq by the end of March. Six so-called "powerships" are currently under construction in Istanbul's Sedef shipyard and Karadeniz Holdings President Orhan Remzi Karadeniz told us that he hopes the powerships will play a leading role in helping Karadeniz Holdings to hit its

increased targets for electricity production this year. The vessels have the ability to move in the sea while generating electricity, and run on dual-fuel systems that are able to convert fuel oil into natural gas in just one day. (Note: these vessels differ from existing "powerbarges" produced in countries such as Singapore because they have self-propelled engines. End Note.)

¶13. (C) Late last year, Karkey signed a five-year contract with the Government of Iraq to operate in Basra, a contract that Karadeniz Holdings representatives say piggybacks on the company's major success exporting electricity to Iraq. (Note: Since 2003, Karadeniz Holdings -- through subsidiary Kartet -- has exported electricity produced in southeastern Turkey from Iraqi heavy fuel oil (HFO) to the Dahuk and Zakho areas of northern Iraq. End Note.) Karkey will send two powerships to the Umm Qasr port in the Persian Gulf to produce 250 MW of electricity using HFO from Basra that currently is neither used nor sold. The first powership, named the "Dogan Bey" is 188 meters long and is scheduled for completion in the next month; Kartet Director Nuray Atacik told us that the Dogan Bey will arrive in Iraq by the end of March and connect to the existing electricity grid, and the second powership will arrive one month later. The total installed capacity of the two ships will be 340 MW and Karadeniz Holdings anticipates 90 percent availability because the engines are either new or recently overhauled.

Target Market: Developing Countries with Coastlines . . . and Social Unrest

---

¶14. (C) Orhan Karadeniz told us that aside from the Basra project, Karkey has an agreement with the Government of Pakistan to send two powerships to Karachi by June, and they are currently in discussions with the Lebanese Government to send the remaining two powerships to Lebanon (Note: Karadeniz said that during Lebanese Prime Minister Hariri's visit to Turkey this month, Karadeniz representatives met with him and showed him the powerships under construction in the shipyard. Karadeniz is expecting an answer from Lebanon soon. End Note.). Karadeniz has considered marketing the project to the Turkish Government; Atacik told us that a year and a half ago this would have been an ideal short-term solution for Turkey in the face of blackouts and potential electricity shortages. Decreased consumption from the economic downturn and full dams due to increased rainfall, however, have temporarily eliminated the need for this type of solution.

¶15. (C) Karadeniz told us that their target market is developing coastal countries desperate for electricity; with quickly mobilized "plug and play" solutions these governments can answer electricity demands from populations that are often clustered near the coasts. Karadeniz said that his company designed the powership with developing countries in mind; the powership is intended as a short- to mid-term solution that would help a country's leadership mitigate potential social or political unrest stemming from irregular electricity provision. Karadeniz said they pitch the idea to governments as a three- to five- year plan. He emphasized that although circumstances in various countries make operating conditions slightly different, the idea is to make the powership executable under a wide range of conditions. For example, in West Africa it would be "ridiculous" to offer to supply the fuel for the power plants because countries like Nigeria have excess fuel; in Pakistan fuel is easily supplied out of Saudi Arabia.

¶16. (C) The powerships can be mobilized rather quickly -- Atacik told us that the ship leaves the shipyard ready to supply electricity with a built-in substation and transformers, so it can be operating within one month factoring in one week to set up position and connect to grid, seven to 10 days to commission the equipment, and a 10- to 14- day voyage.

End-User Cost "Better than the Alternatives"

¶ 7. (C) Although the end-user electricity cost from powerships will be higher than the cost of electricity produced in an efficient, existing combined-cycle power plant, it is reasonable compared with its real alternatives under some circumstances. Karadeniz insists that powership-produced electricity is "not desperately expensive," although he did not cite an exact figure, only suggesting that the price would be under \$0.25/kWh. The key factor in determining end-user cost is the primary resource, he said, and the only other short- to mid-term alternative in many countries are high-speed diesel engines, which are twice as expensive. Karadeniz said that the powership would be 25 to 30 percent cheaper than the cost of electrical generation in his target countries; for example, Pakistan currently is running a power plant at 20 percent efficiency, which the powership will run at 42 percent efficiency. Developing countries facing shortages have few good options: privately-operated generators can cost \$0.25 to \$0.30/kWh; old, inefficient power plants and light diesel oil usage both cost around cost \$0.25/kWh. Karadeniz admitted that environmentally the powership is "not the cleanest alternative" but suggested that if the alternative is running a plant at 20 percent efficiency, it is the comparative lesser of the evils.

¶ 8. (C) Comment. Karadeniz was clearly proud of his company's new innovation and Karkey's success so far in marketing the powership in Iraq and Pakistan suggests that they have found a niche to fill. Karadeniz's expansion in Iraq comes on the heels of Kartet's successful electricity exports to Iraq since 2003 (with one 45-day interruption due to nonpayment), which probably increased the company's confidence and cachet sufficiently to expand operations to other parts of Iraq. The mobile sea-based power plant tracks with Karadeniz's stated desire for now to not actually build anything within Iraq (too complicated) but rather to continue the company's profitable relationship with the Iraqi Ministry of Electricity (the Iraqi Minister of Electricity, Karim Wahid al- Aboudi, was the Commissioner of Electricity under the Coalition Provisional Authority and Karadeniz's relationship with him extends back to that time). It is too early to assess the project's viability but as the powerships begin to come online in Iraq in March and in Pakistan later this year, we will follow up with Karadeniz about their assessments and future plans. End Comment.

WIENER